

Remarks

Claims 1-27 are pending in this application. Applicants have amended claims 1, 26 and 27 to clarify the claimed invention. Applicants respectfully request favorable reconsideration of this application.

The Examiner rejected claims 1-27 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 4,218,834 to Robertsson in view of U.S. patent 6,386,879 to Varshneya.

The combination of Robertsson and Varshneya does not suggest the invention as recited in claims 1-27 since, among other things, the combination does not suggest a weapon simulation system that includes a calculating unit configured to calculate an entire imagined trajectory of a simulated ammunition and a transmitter operative to include in the electromagnetic waves information related to the entire imagined calculated trajectory of the simulated ammunition given as coordinates in the three-dimensional space. Robertsson also does not suggest a processor configured to determine whether a target has been hit based on the information related to the entire imagined calculated trajectory of the simulated ammunition given as coordinates in the three-dimensional space in the received electromagnetic waves.

Rather, Robertsson suggests encoded information that only concerns a relationship between the hypothetical projectile position at the moment of passing or hitting the target and the momentary angular position of the beam. Along these lines, Robertsson suggests first calculating the location of a target in relation to the shooter. Then, the encoded information is transmitted.

Unlike Robertson, which only suggests a hypothetical projectile position at the moment of passing or hitting a target, the invention recited in claims 1, 26 and 27 can compare a location of a target placed at any position reached by the electromagnetic waves to the transmitted calculated ammunition trajectory.

Varshneya does not overcome the deficiencies of Robertson since, Varshneya also does not suggest calculate an entire imagined trajectory of a simulated ammunition. Rather, than a prism as suggested by Robertson, Varshneya suggests a three step sequence including RF and GPS and wherein the last step is a point to point optical transfer of information. In particular, Varshneya suggests substituting the prism with illuminating the target by with laser pulses, transmitting information from the target to the weapon system using a radio channel, and transmitting information about the projectile at the shooting instance with a laser. The target then takes over and makes a hit assessment. Therefore, Varshneya suggests a classical simulation method where the shooting system communicates back and forth with a target.

Varshneya suggests a gunnery simulation system that computes an impact point relative to a target of a simulated ballistic shell fired from a gun when a trigger is pulled based on a target azimuth and elevation, range to the target and time of trigger pull. Thus, Varshneya does not suggest transmitting an entire calculated ammunition trajectory. Varshneya only suggests that the target can, after communication with the weapon system, calculate a ballistic trajectory of the ammunition and thereafter make hit assessment. This is in contrast to the invention recited in claims 1, 26 and 27, in which the target makes hit assessment without communication with the weapon system for any type of trajectory based on the received entire calculated ammunition

trajectory.

In view of the above, the references relied upon in the office action does not suggest patentable features of the claimed invention. Therefore, the references relied upon in the office action do not make the claimed invention obvious. Accordingly, Applicants submit that the claimed invention is patentable over the cited references and respectfully request withdrawal of the rejection based on the cited references.

If an interview would advance the prosecution of this application, Applicants respectfully urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

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